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CENTRAL FAX CENTER

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AMENDMENTS TO THE CLAIMS:

1-6.(cancelled)

7.(previously presented): A cable modem system comprising:

a cable modem termination system for connecting a CATV center to a CATV transmission line;

a first cable modem for connecting a subscriber terminal to the CATV transmission line; and

a DHCP server for dynamically allocating an IP address to the subscriber terminal by transmitting and receiving DHCP messages to and from the subscriber terminal through the first cable modem,

the cable modem termination system having a DHCP server address notifying portion for notifying the first cable modem of a DHCP server address, and

the first cable modem having a DHCP relay agent for relaying the DHCP messages as a relay agent, an IP address detector for detecting the IP address from the DHCP message, an IP address storage for storing the IP address, and a packet filtering portion for discarding a packet having a source IP address other than the IP address stored in the IP address storage when the packet is received from the subscriber terminal,

wherein the first cable modem has a subscriber terminal address notifying portion for notifying the cable modem termination system of the IP address allocated to the subscriber terminal, and

the cable modem termination system has an allocated address manager for storing the IP address notified by the first cable modem corresponding to an address of the first cable

modem itself, and for renewing its storage and notifying a second cable modem to clear the stored IP address thereby making a subscriber terminal connected to the second cable modem be in a state of having an unallocated IP address when the IP address is already stored by a notification from the first cable modem.

8.(currently amended): [[The]] A cable modem system comprising: as claimed in claim 2

a cable modem termination system for connecting a CATV center to a CATV transmission line;

a cable modem for connecting a subscriber terminal to the CATV transmission line; and

a DHCP server for dynamically allocating an IP address to the subscriber terminal by transmitting and receiving DHCP messages to and from the subscriber terminal through the cable modem,

the cable modem termination system having a DHCP server address notifying portion for notifying the cable modem of a DHCP server address, and

the cable modem having a DHCP relay agent for relaying the DHCP messages as a relay agent, an IP address detector for detecting the IP address from the DHCP message to the subscriber terminal, an IP address storage for storing the IP address, and a packet filtering portion for discarding a packet having a source IP address other than the IP address stored in the IP address storage when the packet is received from the subscriber terminal, wherein

if the subscriber terminal is in a state where an IP address is unallocated by the DHCP server, the packet filtering portion discards a packet having the source IP address other

than a predetermined initial IP address when the packet is received from the subscriber terminal
and

wherein the cable modem, being a first cable modem, has a subscriber terminal address notifying portion for notifying the cable modem termination system of the IP address allocated to the subscriber terminal, and

the cable modem termination system has an allocated address manager for storing the IP address notified by the first cable modem corresponding to an address of the first cable modem itself, and for renewing its storage and notifying a second cable modem to clear the stored IP address thereby making a subscriber terminal connected to the second cable modem be in a state of having an unallocated IP address when the IP address is already stored by a notification from the first cable modem.

9-11.(cancelled)